

Remarks

Claims 1-26, 28-30, 32, 34-35, 38-54, and 56-77 are pending in the application. Claims 27, 31, 33, 36-37, and 55 were earlier canceled. Claims 1-2, 5, 7, 11, 17, 39-40, 45, 47, 50, 52, 54, 59 and 65 have been amended. No new matter has been added by virtue of this amendment. Reconsideration of the application as amended is requested.

Priority

The specification has been amended to include the claim for priority based on the Provisional Patent Application already included in the declaration filed on December 6, 2000.

Claim Rejections--35 U.S.C. § 112, second paragraph

The Examiner rejects claims 2-5, 17, 39, 45, and 65 under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 2, 5, 17, 39, 45, and 65 have been amended to fix the problems identified by the Examiner. Therefore the rejection under 35 U.S.C. § 112, second paragraph has been traversed.

Claim Rejections--35 U.S.C. § 102

The Examiner rejects claims 1-10, 12-16, 21-26, 28-30, 34-35, 38-54, and 56-77 under 35 U.S.C. § 102(e) as being anticipated by Agre.

Claim 1, as amended, states:

1. A data collection apparatus, comprising:

a sensing unit for sensing a parameter comprising a sensor, a first data storage device, a first receiving device, and a first transmitting device, said first data storage device for storing data from said sensor, said first transmitting device for transmitting data derived from said sensor;

a control unit separable from said sensing unit, said control unit comprising a second receiving device, a second transmitting device, and a second data storage device different from said first data storage device, said second receiving device to receive data transmitted from said sensing unit, said second data storage device for storing said data received from said sensing unit wherein said sensing unit is configured so an **unscheduled real time signal** from said control unit to said sensing

unit can trigger a change in at least one of: (a) sensor data handling, (b) sensor data collection, (c) sensor data storage in said sensing unit, and (d) sensor data transmission from said sensing unit.

Applicant would respectfully ask the Examiner to consider that Agre does not teach or suggest a network in which communications can be unscheduled. In Agre all communications must be scheduled. For example, in column 10, lines 30-45 Agre states:

Referring again to FIG. 7, after initialization 85 the microprocessor 20 **forms a schedule (86)**, then sets transceiver 12 to listen for the frame synch slice 95a. When frame synch slice 95a is received the microprocessor 20 sets an internal timer to and commences the appropriate activity **according to its schedule (86)**. For example, **if the particular node is not scheduled to receive or transmit in the upcoming slice**, it would load DSP coefficients (88), then acquire sensor data (89), analyze the DSP output (90) (including detecting any alarm conditions output by threshold comparators 19); then, **during the appropriately scheduled slices** the microprocessor enables the transceiver to receive data and commands (91) and to transmit (92) data, including alarm conditions and relayed messages and commands to other nodes. The microprocessor then **waits (93) for the next frame synch 95a** and repeats the activities 88-93 in a loop.

All of Agre's description requires scheduling to avoid "cross-interference," as described in column 1, line 60. The present patent application avoids the need for scheduling.

Claim 39 includes a similar limit. Thus, the rejection of claims 1 and 39 and claims dependent thereon under 35 U.S.C. § 102(e) as being anticipated by Agre has been traversed.

Claim 40, as amended, states:

40. A data collection apparatus, comprising a network of addressable sensing units and a control unit, wherein said sensing units are for sensing a parameter, wherein said sensing units each comprise a sensor, an addressable microprocessor, a first data storage device connected to said microprocessor, a first transmitting device and a first receiving device, wherein said sensing units are configured so a real time signal from said control unit to at least one said sensing unit can trigger a change in at least one of: (a) data handling, (b) data collection, and (c) data storage in said sensing unit, and (d) sensor data transmission from said sensing unit to said control unit, **wherein said network of addressable sensing units and said control unit are arranged in a hierarchical architecture.**

Applicant would respectfully ask the Examiner to consider that Agre does not teach or suggest a "wherein said network of addressable sensing units and said control unit are arranged in a hierarchical architecture." Agre teaches against such an architecture in column 1, lines 55-57. Claim 50 includes a similar limit. Thus, the rejection of claims 40 and 50 and claims dependent thereon under 35 U.S.C. § 102(e) as being anticipated by Agre has been traversed.

Claim Rejections--35 U.S.C. § 103(a)

The Examiner rejects claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Agre. Claim 1, from which claim 11 depends, has been amended to more clearly distinguish from Agre. Thus, the rejection of claim 11 under 35 U.S.C. § 103(a) as being anticipated by Agre has been traversed.

The Examiner rejects claims 17-20 under 35 U.S.C. § 103(a) as being unpatentable over Agre in view of Fischell. Claim 1, from which claims 17-20 depend, has been amended to more clearly distinguish from Agre and from Agre in view of Fischell. Neither reference individually or in combination teach or suggest the limits in claim 1 highlighted above. Thus, the rejection of claims 17-20 under 35 U.S.C. § 103(a) as being anticipated by Agre in view of Fischell has been traversed.

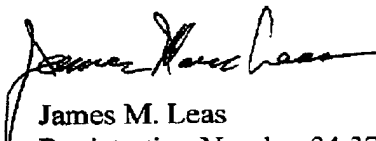
The Examiner rejects claims 32-33 under 35 U.S.C. § 103(a) as being unpatentable over Agre in view of Julien. Claim 1, from which claims 32-33 depend, has been amended to more clearly distinguish from Agre and from Agre in view of Julien. Neither reference individually or in combination teach or suggest the limits in claim 1 highlighted above. Thus, the rejection of claims 17-20 under 35 U.S.C. § 103(a) as being anticipated by Agre in view of Julien has been traversed.

Response to Remarks

Applicant has further amended the independent claims to more clearly distinguish from Agre. As amended the independent claims should now be allowable.

Consideration of the application as amended is requested. Applicant respectfully requests favorable reconsideration. If there are any questions please call applicant's attorney at 802 864-1575.

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